

Appl. No. 10/646,554
Amdt. Dated February 2, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-3 (cancelled)

4. (currently amended) An automated product design method comprising:
selecting at least one product layout from a plurality of retained product layouts having one or more image containers,
selecting at least one image from a plurality of retained images having at least a manually selected portion representing a minimum image area, each retained image having associated therewith retained information sufficient to define the size and location within the image of at least a minimum image area, the minimum image area having been chosen by an image preparer based on at least the image preparer's visual review of the image prior to the image being made available for selection, and
creating at least one cropped image version for at least one image container of at least one selected layout by performing at least a cropping operation on at least one selected image such that the cropped image version contains at least the minimum image area of the selected image.
5. (previously presented) The method of claim 4 wherein at least one cropped image version is created such that, to the extent possible, the minimum image area is positioned substantially in the center of the cropped image version.
6. (previously presented) The method of claim 4 wherein at least one cropped image version is created such that, to the extent possible, the minimum image area is positioned

Appl. No. 10/646,554
Amdt. Dated February 2, 2006

in a location in the cropped image version that is substantially proportional to the position of the minimum image area in the selected image.

7. (previously presented) The method of claim 4 wherein the step of creating includes resizing the selected image prior to performing a cropping operation.

8. (currently amended) An automated product design method comprising:
selecting at least one product layout from a plurality of retained product layouts having one or more image containers,

selecting at least one image from a plurality of retained images ~~having at least a manually selected image portion representing an ideal image area, each retained image having associated therewith retained information sufficient to define the size and location within the image of at least an ideal image area, the ideal image area having been selected by an image preparer prior to the image being made available for selection,~~ and

creating at least one cropped image version for at least one image container of at least one selected layout by performing at least a cropping operation on at least one selected image such that the cropped image version is ~~, to the extent possible,~~ created from the portion of the image representing the ideal image area of the image.

9. (previously presented) The method of claim 8 wherein at least one cropped image version is created such that any content that is cropped from the selected image during a cropping operation is cropped substantially equally from opposite edges of the ideal image area, whereby the cropped image version is created substantially from the center of the ideal image area

10. (previously presented) The method of claim 8 wherein the step of creating includes resizing the selected image prior to performing a cropping operation.

11. (currently amended) An automated product design method comprising:
selecting at least one product layout from a plurality of retained product layouts having one or more image containers,

Appl. No. 10/646,554
Amtd. Dated February 2, 2006

selecting at least one image from a plurality of retained images having at least a manually selected image portion representing a minimum image area and a manually selected image portion representing an ideal image area, each retained image having associated therewith retained information sufficient to define the size and location within the image of at least a minimum image area and an ideal image area, the minimum and ideal image areas having been chosen by an image preparer based on at least the image preparer's visual review of the image prior to the image being made available for selection, and

creating at least one cropped image version for at least one image container of at least one selected layout by performing at least a cropping operation on at least one selected image such that the cropped image version contains at least the minimum image area and is, to the extent possible, created substantially from the ideal image area.

12. (previously presented) The method of claim 11 wherein at least one cropped image version is created such that, to the extent possible, the minimum image area is positioned in a location in the cropped image version that is substantially proportional to the position of the minimum image area in the ideal image area.

13. (previously presented) The method of claim 11 wherein at least one cropped image version is created such that, to the extent possible, the minimum image area is positioned substantially in the center of the cropped image version..

14. (previously presented) The method of claim 11 wherein at least one cropped image version is created such that any content that is cropped from the selected image during a cropping operation is cropped substantially equally from opposite edges of the ideal image area, whereby the cropped image version is created substantially from the center of the ideal image area

15. (previously presented) The method of claim 11 wherein the step of creating includes resizing the selected image prior to performing a cropping operation.

Appl. No. 10/646,554
Amdt Dated February 2, 2006

16. (previously presented) A computer-readable medium having computer-executable instructions for performing the steps of claim 11.

17. (currently amended) An automated cropping method for an electronic image having a ~~manually predetermined portion representing a defined minimum image area, the minimum image area having been previously selected by an image preparer based on at least the image preparer's visual review of the image,~~ the method comprising:

- (a) determining at least the size of an image container,
- (b) if a cropped version of the image can be created that meets the conditions of (i) filling the image container, (ii) containing at least the minimum image area, and (iii) having at least a predetermined minimum image resolution, creating the cropped version of the image for the image container, and
- (c) if a cropped image version cannot be created at step (b), identifying the image as being incompatible with the image container.

18. (previously presented) The method of claim 17 wherein the cropped version is created at step (b) such that the cropped version includes as much of the image as possible.

19. (currently amended) An automated cropping method for an image having a ~~predetermined portion representing an defined ideal image area, the ideal image area having been previously selected by an image preparer based on at least the image preparer's visual review of the image,~~ the method comprising

- (a) determining at least the size of an image container,
- (b) if a cropped version of the image can be created such that the cropped version meets the conditions of (i) filling the image container, (ii) having at least a predetermined minimum image resolution and (iii) including only content from the ideal image area, creating a corresponding cropped version containing image content entirely from within the ideal image area,
- (c) if a cropped version of the image cannot be created at step (b) and if a cropped version can be created such that the cropped version meets the conditions of (i)

Appl. No. 10/646,554
Amdt. Dated February 2, 2006

filling the image container and (ii) having at least a predetermined minimum image resolution, creating a corresponding cropped version containing at least some image content from outside the ideal image area, and

(d) if a cropped version of the image cannot be created at step (b) or step (c), identifying the image as being incompatible with the image container.

20. (previously presented) The method of claim 19 wherein the corresponding cropped version is created at step (b) such that the cropped version meets the further condition of (iv) including as much of the ideal image area as possible.

21. (previously presented) The method of claim 19 wherein the corresponding cropped version created at step (c) such that the cropped version meets the further condition of (iii) including as little as possible of the image that is outside the ideal image area.

22. (currently amended) An automated cropping method for an image having a predefined first image area and a predefined second image area, the first image area being smaller than the image and the second image area being smaller than the first image area, the method comprising

(a) determining at least the size of an image container,
(b) if the image can be cropped such that a cropped version can be created that has at least a predetermined minimum image resolution when sized to fit the image container, contains all of the second image area, and contains no part of the image that is outside of the first image area, creating a corresponding cropped version containing image content entirely from within the first image area,

(c) if a cropped version cannot be created at step (b) and the image can be cropped such that a cropped version can be created that has at least a predetermined minimum image resolution when sized to fit the image container and contains all of the second image area, creating a corresponding cropped version containing at least some image content from outside the first image area,

(d) if a cropped version cannot be created at step (b) or (c), identifying the image as being incompatible with the image container.

Appl. No. 10/646,554
Amtd. Dated February 2, 2006

23. (previously presented) The method of claim 22 wherein the corresponding cropped version created at step (b) is created such that it includes as much of the first image area as possible.

24. (previously presented) The method of claim 22 wherein the corresponding cropped version created at step (c) is created such that it includes as little of the image outside of the first image area as possible.

25. (currently amended) The method of claim 22 wherein the cropped version is created such that, to the extent possible, the first second area is positioned substantially in the center of the cropped version.

26. (previously presented) A computer-readable medium having computer-executable instructions for performing the steps of claim 22.

27. (currently amended) An image processing system comprising
at least one server system having data storage means,
a plurality of layouts stored on the server system and including one or more image containers,
a plurality of images and associated minimum image area information stored on the server system and having at least an a manually selected image portion representing a minimum image area, the associated information for each image including at least information sufficient to define the size and location of at least a minimum image area in the image, the minimum image area having been chosen by an image preparer based on at least the image preparer's visual review of the image, and

an image processing program executable on the server system and having program code for creating at least one cropped image version of at least one image selected from the plurality of stored images such that the cropped image version is sized to fit at least one image container in at least one stored layout and contains at least the minimum image area of the selected image.

Appl. No. 10/646,554
Amdt. Dated February 2, 2006

28. (currently amended) An image processing system comprising at least one server system having data storage means, a plurality of layouts stored on the server system and including one or more image containers,
~~a plurality of images and associated ideal image information stored on the server system and having at least a manually selected image portion representing an ideal image area, the associated information for each image including at least information sufficient to define the size and location of at least an ideal image area in the image, the ideal image area having been chosen by an image preparer based on at least the image preparer's visual review of the image, and~~
an image processing program executable on the server system and having program code for creating at least one cropped image version of at least one image selected from the plurality of stored images such that the cropped image version is sized to fit at least one image container in at least one stored layout and is created, ~~to the extent possible, from the portion of the selected image representing the ideal image area.~~

29. (currently amended) An image processing system comprising at least one server system having data storage means, a plurality of layouts stored on the server system and including one or more image containers,
~~a plurality of images and associated minimum and ideal image information stored on the server system and having at least a manually selected image portion representing an ideal image area and a manually selected image portion representing a minimum image area, the associated information for each image including at least information sufficient to define the size and location of at least a minimum image area and an ideal image area in the image, the minimum and ideal image areas having been chosen by an image preparer based on at least the image preparer's visual review of the image, and~~
an image processing program executable on the server system and having program code for creating at least one cropped image version of at least one image selected from the plurality of stored images such that the cropped image version is sized to fit at least

Appl. No. 10/646,554
Amdt. Dated February 2, 2006

one image container in at least one stored layout, is created to the extent possible from the portion of the selected image representing the ideal image area, and contains at least the minimum image area.

30. (currently amended) A method for processing a plurality of digital image images to prepare and store information related to the image images for later use with an automated cropping system, the method comprising

an image preparer visually examining the content of the each image,
based on the content at least the image preparer's visual examination of the image, manually defining the image preparer selecting at least one portion of the image to be used by the automated cropping system in during the process of preparing a all cropped version versions of the image, and

storing the image images and the definition of the at least one selected portion of the each image, the definition including at least information sufficient to determine the size and position of the at least one selected portion within the image.

31. (previously presented) The method of claim 30 wherein at least one defined portion of the image is a minimum area of the image that must appear in every cropped version of the image.

32. (previously presented) The method of claim 30 wherein at least one defined portion of the image is an ideal area representing a desirable area of the image.

33. (new) The method of claim 4 further comprising producing one or more printed copies of the product design containing at least one cropped image version.

34. (new) The method of claim 4 wherein at least some of the retained images have one or more keywords associated therewith and wherein the at least one image selected from the plurality of retained images is selected based on at least one keyword associated with the image.

Appl. No. 10/646,554
Amdt. Dated February 2, 2006

35. (new) The method of claim 8 further comprising producing one or more printed copies of the product design containing at least one cropped image version.

36. (new) The method of claim 8 wherein at least some of the retained images have one or more keywords associated therewith and wherein the at least one image selected from the plurality of retained images is selected based on at least one keyword associated with the image.

37. (new) The method of claim 11 further comprising producing one or more printed copies of the product design containing at least one cropped image version.

38. (new) The method of claim 11 wherein at least some of the retained images have one or more keywords associated therewith and wherein the at least one image selected from the plurality of retained images is selected based on at least one keyword associated with the image.